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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,494	12/23/2003	Ho-Seon Rew	0630-1892P	7786
2292	7590	09/15/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SNIDER, THERESA T	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,494

Applicant(s)

REW ET AL.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/23/04, 2/24/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because of the inclusion of legal phraseology; lines 9, 13 and 15, 'means'. Correction is required. See MPEP § 608.01(b).
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The disclosure is objected to because of the following informalities:
Exemplary of such:
Page 1, line 7, it is unclear as to what is meant by 'lay on';
Line 23, 'on' should be replaced with 'from'.
Page 2, line 25, it is unclear as to what is meant by 'there are some problems to clean'.
Page 5, lines 9-15 are repetitive of the brief description of the drawings;
Line 21, it is unclear as to what is meant by 'and have';
Lines 24-25, it is unclear as to what is meant by 'In order...are connected.'.
Page 6, lines 17-18 and 21, it is unclear as to what is meant by 'so as to be horizontal to';
Line 24, it is unclear as to what is meant by 'circular-bar shape';
Line 25, 'a valve' should be replaced with 'the valve'.
Page 7, line 1, 'a'(both occurrences) should be replaced with 'the';

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Line 9, 'the'(both occurrences) should be replaced 'a';

Lines 12 and 14, 'the' should be replaced 'a';

Line 20, it is unclear as to what is meant by 'projected-formed'.

Page 8, lines 12-13, it is unclear as to what is meant by 'in a storage of the filter unit 12';

Line 20, it is unclear as to what is meant by 'switches the flow...switches';

Line 24, '22b' should be inserted after 'channel'.

Appropriate correction is required.

Claim Objections

5. Claims 2-12 are objected to because of the following informalities: claim 2, line 1, 'includes' should be replaced with 'include'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 5, it is unclear as to what is meant by 'so as to have cleaning implement';

Line 6, it is unclear as to what is meant by 'for removing impurities outside';

Lines 9-11, it is unclear as to what is meant by 'for selectively...unit';

Line 12, it is unclear as to what is meant by 'through among'.

Claim 2, line 3, 'so as to be' should be deleted;

Lines 6 and 11, 'for' should be deleted.

Claim 4, lines 6 and 8, 'for' should be deleted.

Claim 7, line 2, it is unclear as to what is meant by 'so as to be vertical to'.

Claim 12, line 1, 'the knob' lacks proper antecedent basis; should the claim be dependent from 11?

Line 1, it is unclear as to what is meant by 'projected-formed';

Line 2, it is unclear as to what is meant by 'to have a certain length and width'.

Don't most objects have a length and width?

Claim 13, line 5, it is unclear as to what is meant by 'on the bottom with air';

Line 10, the 'means' statement lacks a 'for';

Lines 11-14, it is unclear as to what is meant by 'so as to...head unit';

Lines 15-17, it is unclear as to what is meant by 'for providing...switch means'.

Claim 14, line 3, 'so as to be' should be deleted;

Line 6, 'for' should be deleted.

Claim 16, lines 6 and 8, 'for' should be deleted.

Claim 18, line 2, it is unclear as to what is meant by 'so as to be vertical to'.

Claim 19, line 2, it is unclear as to what is meant by 'is contacted to'.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nam et al..

Nam et al. discloses a casing (fig. 2, #101).

Nam et al. discloses a suction force generating unit installed in the casing (0031).

Nam et al. discloses a head unit connected with the casing (fig. 2, #102).

Nam et al. discloses a filter unit installed in the casing (fig. 2, #101a).

Nam et al. discloses a flow channel switch means installed in the casing (fig. 2, #210).

Nam et al. discloses plural pipes (fig. 3, #212b-d).

With respect to claim 13, Nam et al. discloses the switch means connected with the head unit (fig. 2, #220).

10. Claims 1-3 and 10-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Edstrom.

Edstrom discloses a casing (fig. 1, #10).

Edstrom discloses a suction force generating unit installed in the casing (fig. 1, #16).

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Edstrom discloses a head unit connected with the casing (fig. 1, #28).

Edstrom discloses a filter unit installed in the casing (fig. 1, #14).

Edstrom discloses a flow channel switch means installed in the casing (fig. 1, #27).

Edstrom discloses plural pipes (fig. 4, #29, area bounded by #21,17).

With respect to claim 13, Edstrom discloses the switch means connected with the head unit (fig. 1, #27,28).

With respect to claims 2 and 14, Edstrom discloses a head unit connecting pipe (fig. 4, unnumbered horizontal portion of #27). Edstrom discloses a main inflow pipe installed between the switch means and the filter unit (fig. 4, #29). Edstrom discloses a guide pipe connecting the filter unit with the generating unit (fig. 3, area defined within #13). Edstrom discloses a main discharge pipe connected to a suction side of the generating unit (fig. 1, #17). Edstrom discloses a sub-discharge pipe connecting the switch means with the main discharge pipe (fig. 6, unnumbered pipe between #27 and #13).

With respect to claims 3 and 15, Edstrom discloses a valve housing fixedly installed to the casing having plural through holes (fig. 1, #11). Edstrom discloses a switch valve rotatively inserted into the housing (figs. 1, 4 and 6, #27).

With respect to claims 10-11, Edstrom discloses a part of the valve is exposed to the outside of the casing including a knob(fig. 8, #31).

With respect to claim 12, Edstrom discloses the handle having a certain length and width (fig. 8, #31).

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11. Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kajihara et al..

Kajihara et al. discloses a casing (fig. 1, #1).

Kajihara et al. discloses a suction force generating unit installed in the casing (fig. 2, #3).

Kajihara et al. discloses a head unit connected with the casing (fig. 2, #5).

Kajihara et al. discloses a filter unit installed in the casing (fig. 2, #14).

Kajihara et al. discloses a flow channel switch means installed in the casing (fig. 1, #9).

Kajihara et al. discloses plural pipes (fig. 4, #23A-C).

With respect to claim 13, Kajihara et al. discloses the switch means connected with the head unit (fig. 1, #11).

Allowable Subject Matter

12. Claims 4-9 and 16-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses a vacuum cleaner having a casing, a suction force generating unit installed in the casing, a head unit connected with the casing, a filter unit installed in the casing, a flow channel switch means installed in the casing, plural pipes, a head unit connecting pipe, a main inflow pipe installed between the switch means and the filter unit, a guide pipe connecting the filter unit with the generating unit, a main discharge pipe connected to a suction side of the generating unit, a sub-discharge pipe connecting the switch means with the main discharge pipe,

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14. a valve housing fixedly installed to the casing having plural through holes including a first hole connected to the head unit connecting pipe, a second hole connected to the main inflow pipe and a third hole connected to the sub-discharge pipe, a switch valve rotatively inserted into the housing and the plural flow channels including a first flow channel connecting the first hole with the second or third hole HOWEVER fails to disclose or fairly suggest a second flow channel connecting the second through hole of the valve housing with ambient air when the first flow channel connects the first through hole with the third through hole. The prior art discloses a vacuum cleaner having a casing, a suction force generating unit installed in the casing, a head unit connected with the casing, a filter unit installed in the casing, a flow channel switch means installed in the casing, plural pipes, a head unit connecting pipe, a main inflow pipe installed between the switch means and the filter unit, a guide pipe connecting the filter unit with the generating unit, a main discharge pipe connected to a suction side of the generating unit and a sub-discharge pipe connecting the switch means with the main discharge pipe HOWEVER fails to disclose or fairly suggest the sub-discharge pipe being diverged from a middle portion of the main discharge pipe and integrally formed with therewith.

Conclusion

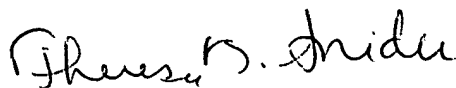
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bowden et al. and Steinberg et al. discloses a vacuum cleaner with a flow channel switch means and a plurality of pipes.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Theresa T. Snider
Primary Examiner
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9/11/06